
IEEE Transactions on Consumer Electronics

Call for Papers

Special Section on "Large Language Models for Consumer Health "

Theme:

Consumer Health allows individuals to oversee their health and well-being consistently, empowering through self-care practices, preventive measures, informed decision-making, and personalized solutions. This paradigm stems from a traditional reactive approach to a personalized-proactive model, upholding the principles of a patient-centric system. Large Language Models (LLMs), harnessing the benefits of Natural Language Processing and Deep Learning, have a pivotal role in the transformative landscape of consumer health. These models act as stimulators by ensuring the deployment of personalized health assistants and emerging health information retrieval systems and have the potential to navigate the complexities of healthcare. This integrated approach allows consumers to harness the manifold facets of healthcare, encompassing medication management, symptom checking, and health education, thereby safeguarding individual well-being. The transformative integration of LLMs into consumer healthcare management stands poised to revolutionize health literacy, nurture proactive health behaviors, and elevate the overall user experience within the healthcare realm.

However, LLMs in consumer healthcare management encounter manifold challenges. The first and foremost challenge is the accurate interpretation of healthcare information and its contextual nuances, given the field's complicated terminology, diverse patient experiences, and the ever-evolving landscape of medical research, all of which carry implications for individual well-being. Privacy concerns related to patient data denote an essential concern, necessitating strict adherence to data security regulations, given the substantial volume of health data processed by these models. Equally influential is the imperative to cultivate trust between consumers and the LLM model, entailing transparent communication about the model's limitations and strengths and providing reliable sources of knowledge to consumers. Overcoming these challenges is mandatory for the successful deployment of LLMs in Consumer Healthcare Management, wherein a meticulous investigation of trustworthy, personalized, and ethical considerations is critical to transforming the healthcare technology landscape.

Scholars, academicians, and researchers are encouraged to contribute manuscripts that evaluate the harnessing of LLMs in consumer healthcare. Such contributions pledge to revolutionize the consumer health landscape and lead the trajectory of future healthcare paradigms.

Topics of interest in this Special Section include (but are not limited to):

- Enhancing Consumer Health Literacy through LLMs
- Delving individual Acceptance and Trust for LLMs Model for Consumer Health
- Customizing personalized features in LLMs for enhancing consumer health
- Security and Privacy of Consumer Health Data for LLMs
- Synergy of LLMs with Wearable Consumer Health devices for Real-Time Insights

- Advancing Semantic Interportblity for diverse consumer Health data set for LLMs
- Evaluating long-term impacts of LLMs on Consumer Health
- Integrating feedback from consumers into LLMs for better insights into Consumer health
- Converging the LLMs with Electronic Consumer Health Records
- Collaborative learning to elevate the performance of LLMs in Consumer Health
- More Accesicissble LLMs for making inclusive consumer health system
- Computing Risk Management of Consumers through LLMs
- Empowering and Engaging Consumers for self-care using LLMs
- Enhancing Linguistic sensitivity for diverse consumers
- Dietary and herbal supplements planning through LLMs

Important dates:

Submissions Deadline:	August 31, 2024
First Reviews Due:	October 31, 2024
Revision Due:	December 15, 2024
Second Reviews Due/Notification:	January 31, 2025
Final Manuscript Due	February 28, 2025
Publication Date (Tentative):	2nd quarter, 2025

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Instructions for authors:

Manuscripts should be prepared following guidelines at: <https://ctsoc.ieee.org/publications/ieee-transactions-on-consumer-electronics.html> and must be submitted online following the IEEE Transactions on Consumer Electronics instructions: <https://ctsoc.ieee.org/publications/ieee-transactions-on-consumer-electronics.html>. During submission, the Special Section on "**(please fill)**" should be selected.